Remark

Applicants respectfully request reconsideration of this application as amended. Claims 1, 10 and 16 have been amended. No claims have been cancelled. Claims 21-22 are new. Therefore, claims 1-22 are present for examination.

Drawings

The Examiner has objected to the drawings as showing untitled black boxes. Applicants are aware of no requirement that black boxes be labeled, however, in an effort to advance the prosecution of the application replacement formal drawings are submitted herewith in which unlabeled circles 10, 12, and 14 are labeled as END HOST, as described in the specification.

35 U.S.C. §102 Rejection

Nelson et al.

The Examiner has rejected claims 1-2, 6-7, 10-11, 14 and 16-17 under 35 U.S.C. §102 (b) as being anticipated by Nelson, U.S. Patent No. 5,835,720 ("Nelson"). In Nelson, the network manager 40 builds its hierarchical data structure by first accessing its own IP address table and local routing table in its ARP cache. (Col. 5, line 39) The local routing table is used to identify a default router. (Col. 5, line 43). The NM then retrieves the routing table, IP address table and ARP table of the default router. (Col. 5, line 61). The network manager uses the retrieved routing table to find more routers and retrieve their tables until it has completed the construction of the hierarchical data structure. (Col. 6, lines 16-29). The network manager then pings all the addresses for verification.

The process outlined in Nelson is limited by the knowledge of the discovered routers.

Routers are not generally designed to determine network topology but to deliver messages. In addition, because it relies on ping and traceroute type messages sent from the network manager 40, as described in columns 6 and 7, it suffers from the same disadvantages described in paragraphs 4 and 5 of the present application.

In the present invention as recited, for example, in Claim 1, as amended, there are three different entities at work. A policy server receives registrations and sends out policies to a first and a second network device, such as the Smartlinks described in the application. The first and second network devices then run the policies to discover the network. The identities established by running the policies is then used to determine the topology. By using multiple devices that run specific policies, the shortcomings of Nelson may be overcome. As mentioned above, these shortcomings include the limits of using ping and traceroute from a single location and the limits inherent in routing tables that are developed for use in routing, not for network topology.

Accordingly, Claim 1 is believed to be allowable over Nelson.

Claims 10 and 16, as amended, contain limitations similar to those discussed above with respect to Claim 1 and are believed to be allowable on the same grounds. The remaining claims depend from one of Claims 1, 10 and 16 and are believed to be allowable therefore as well as for the express limitations set forth in each claim respectively.

The other references, Aggarwal, U.S. Patent No. 5,675,741 ("Aggarwal") and Fishler, U.S. Patent No. 6,507,646 B1 ("Fishler"), fail to overcome the limitations of Nelson set forth above.

Conclusion

Applicants respectfully submit that the rejections have been overcome by the amendment and remark, and that the claims as amended are now in condition for allowance. Accordingly, Applicants respectfully request the rejections be withdrawn and the claims as amended be allowed.

Invitation for a Telephone Interview

The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

Request for an Extension of Time

Applicants respectfully petition for a one month extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a). Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17(a) for such an extension.

Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: November 22, 2004

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Attorney Docket No. 42P10459 Application No. 09/822,539